

IN THE CLAIMS

1. (currently amended) A composition for selectively internally labeling a target cell, comprising:

a ligand which specifically binds to a surface antigen of a target cell and is internalized by the cell, wherein the ligand is selected from the group consisting of (1) an antibody, (2) a fragment of an antibody, and (3) a synthetic polypeptide;

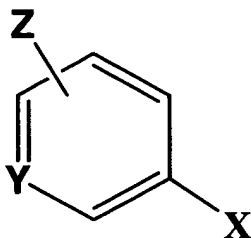
an oligopeptide which comprises at least one positively-charged amino acid residue and at least one D-amino acid residue, wherein the oligopeptide does not comprise two or more contiguous L-amino acids, wherein said oligopeptide is covalently bound to the ligand; wherein the oligopeptide does not specifically bind to the surface antigen; and

a label which is covalently bound to the oligopeptide.

2. (previously presented) The composition of claim 1 comprising two non-contiguous L-amino acids, wherein the L-amino acids are separated from one another by one or more positively-charged D-amino acids.

3. (previously presented) The composition of claim 1, wherein the label is a moiety of formula (II):

(II)



wherein X is a moiety selected from the group consisting of an amino, carboxyl, or sulfhydryl moiety, and wherein X forms a covalent linkage with the oligopeptide;

wherein Y is selected from the group consisting of C and N; and

wherein Z is selected from the group consisting of F, Br, I, At, and M(Alk)₃; wherein M is selected from the group consisting of Si, Sn, and Hg; wherein Alk is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, and hexyl.

4. (original) The composition of claim 3, wherein the label is selected from the group consisting of 5-iodo-3-pyridinecarboxylate, 3-iodobenzoate, 3-(tri-*n*-butylstannyl)benzoate, 5-(tri-*n*-butylstannyl)-3-pyridinecarboxylate, and 5-astato-3-pyridinecarboxylate, 3-iodoaniline, 4-iodoaniline, 3-astatoaniline, 4-astatoaniline, 3-tributylstannylaniline, and 4-tributylstannylaniline.

5. (currently amended) The composition of claim 1, wherein the ligand is an antibody and wherein the antibody is a monoclonal antibody.

6. (currently amended) The composition of claim 1, wherein the ligand is an antibody and wherein the antibody is an interspecies recombinant antibody.

7. (currently amended) The composition of claim 1, wherein the ligand is an antibody and wherein the antibody is a humanized antibody.

8. (currently amended) The composition of claim 1, wherein the ~~ligand selectively binds to~~ target cell is a tumor cell.

9. (original) The composition of claim 1, wherein the ligand selectively binds to EGFRvIII.

10. (currently amended) The composition of claim 9, wherein the ligand is an antibody and wherein the antibody is a monoclonal antibody that specifically binds to EGFRvIII.

11. (original) The composition of claim 1, wherein the oligopeptide comprises D-Tyr.

12. (original) The composition of claim 11, wherein the oligopeptide additionally comprises D-Arg.

13. (original) The composition of claim 11, wherein the oligopeptide additionally comprises at least three D-Arg residues.

14. (original) The composition of claim 1, wherein the oligopeptide comprises D-Lys.

15. (original) The composition of claim 14, wherein the oligopeptide additionally comprises D-Arg.

16. (original) The composition of claim 14 wherein the oligopeptide additionally comprises at least three D-Arg residues.

17. (original) The composition of claim 1, wherein the label comprises a radionuclide.

18. (original) The composition of claim 8, wherein the label comprises a radionuclide.

19. (original) The composition of claim 17, wherein the radionuclide is an alpha, beta, or gamma emitter.

20. (original) The composition of claim 17, wherein the radionuclide is selected from the group consisting of ^{18}F , ^{75}Br , ^{76}Br , ^{77}Br , ^{123}I , ^{124}I , ^{125}I , ^{131}I , and ^{211}At .

21. (original) The composition of claim 1, wherein the label is fluorescent.

22-43. (canceled)

44. (previously presented) The composition of claim 1, wherein the oligopeptide comprises at least two positively-charged amino acids.

45. (previously presented) The composition of claim 1, wherein the ligand is a fragment of an antibody comprising a portion of an immunoglobulin light chain variable region and a portion of an immunoglobulin heavy chain variable region.

46. (previously presented) The composition of claim 1, wherein the ligand is a single chain Fv fragment of an antibody.

47. (previously presented) The composition of claim 1, wherein the ligand comprises a single chain Fv fragment of an antibody.

48. (new) The composition of claim 1 wherein the ligand is a synthetic polypeptide and the target cell is a tumor cell.